

REMARKS

Claims 1-6 were originally presented for examination. Claims 5-6 are non-elected and stand withdrawn; Claims 1 and 3 are amended; and new Claims 7 and 8 are added. New Claim 7-8 are not restricted to potato patties; rather these new claims are directed to a potato product. These new claims do not introduce new matter since the specification describes the process generally with respect to "potato product" at paragraphs 0013-0020. Accordingly, Claim 1-4 and 7-8 remain for further consideration.

Objection to the Specification:

At paragraph 4, the Office Action objects to the specification under 35 U.S.C. § 112 on the ground that there is no antecedent basis in the specification for freezing a heated potato patty.

Paragraph 0020 of the specification has been amended to obviate this objection. Care has been taken to assure that no new matter is added. Applicants note that the drawings are part of the application and, further, that the drawing of this application shows that an optional freezing step 122c occurring after the impingement baking step 132 a, b, or c. Accordingly, amended paragraph 0020 clarifies the sequence of the baking step and the optional freezing step and obviates the objection to the specification.

Rejection of Claims 1-4 under 35 U.S.C. § 112:

At paragraphs 3 and 5, the Office Action rejects Claims 1-4 under 35 U.S.C. § 112, ¶2, as being indefinite. One basis for the rejection, identified in paragraph 3, holds that the claims do not recite the sequence in which the heating and freezing steps occur. A second basis for the rejection, identified in paragraph 5, concerns a wording change in Claims 1 and 3.

Appropriate amendments to Claims 1 and 3 have been made to obviate these rejections. Specifically, in each of Claims 1 and 3 the word “in” has been changed to –with– as suggested by the Office Action. In addition, the word –thereafter– has been added to the freezing step to clarify that it occurs at a time subsequent to the heating step.

It is respectfully submitted that these amendments obviate the rejections based on 35 U.S.C. § 112.

Rejection Under 35 U.S.C. § 103(a):

Claims 1-4 stand further rejected under 35 U.S.C. § 103(a) on the ground that they would have been obvious to one of ordinary skill in the art at the time this invention was made considering the Biegel et al. patent (U.S. Patent No. 4,772,478) in view of either the Taylor et al. patent (U.S. Patent No. 5,991,938) or the Kester et al. patent (U.S. Patent No. 6,013,296).

The Biegel et al. patent concerns a method of making a frozen hash brown potato patty where the potato patty is fried by immersion in a hot edible oil, degreased after frying

by heating the fried patty at a temperature above its frying temperature, and then frozen.

See, Col. 3, lines 3-9. Importantly, the Biegel et al. patent consistently refers to frying the patty by immersion in hot oil. Col. 3, lines 3-5; Col. 4, lines 56-57; Biegel et al.

disclose an infrared heating device (Fig. 2; Col. 5, lines 3-8) and an elongated passageway with radiant heating tubes (Fig. 6; Col. 5, line 68 to Col. 6, line 8). Biegel et al. further state:

The heat may be applied by convective or radiant heating of the surface of the patty from a variety of heat sources, including gas fired equipment or electrically heated equipment, direct or indirect heating equipment. For example, ovens, convection ovens and radiant-heat type ovens could be used. Preferred heating apparatus 40 (100) heretofore described and shown in FIGS. 2, 4 and 5 (or 6, 7, and 8) which are positioned to heat the principal faces of the patty 86 (135).

With radiant or convective heating, the heat is preferably directed onto the principal faces of the patty, which have the greatest surface area.

Col. 8, line 57, through Col. 9, line 1.

That degreasing by heat continues for the time required to induce oil to drip from the patty surface thereby reducing the oil drip at reheating, but not long enough to char the patty surface.

Thus, the Biegel et al. patent prefers – and seems to rely – on heat and gravity to remove excess oil (Col. 3, lines 48-50), rather than use heat coupled with the motive force applied by an impingement oven to accomplish excess oil removal. Moreover, as seen from Tables 2-4 of the Biegel et al. patent, the resulting product does not avoid oil drip – rather, the oil drip is seen to be 0.5 grams in acceptable products. That amount does not represent no drip.

The Taylor et al. and Kester et al. patents are commonly assigned, have the same effective filing dates, have five of their six inventors the same, and have similar specifications. Both patents concern a process for oven-finishing French fries. Both patents teach treatment of the potato strips by deep frying or immersion in oil and acknowledge that "a heated oil spray that surrounds the potato strip with hot oil or frying in an oil foam can be used." (Kester et al., Col. 3, lines 53-61; Taylor et al., Col. 3, lines 43-51). In both patents, the par-fried potato strips are immediately enrobed with oil or cooled/frozen prior to enrobing. (Kester et al., Col. 4, lines 18-19; Taylor 35 al., Col. 4, lines 6-7). Both patents also identify exactly the same models of "Hot Air Impingement Ovens" (Kester et al., Col. 8, lines 5-11; Taylor et al., Col. 9, lines 9-15).

However, these two patents differ in their disclosure of the oven finishing step. According to Kester et al., a forced air convection or impingement oven is used for 0.75 to 5 minutes, at 350-500° F, with hot air velocity in the oven chamber of 1,000-8,000 ft./min. (Col. 7, lines 21-33). Kester et al. also indicates that the baked fries may be coated with 1-10% by weight of oil – which strongly suggests that the air impingement oven strips the enrobing oil. By contrast, Taylor et al. identifies suitable finishing ovens as forced air convection ovens, combination infrared radiation and convection ovens, radiant heat ovens, toasters, toaster ovens, high velocity air impingement ovens, combination infrared-convection ovens (Col. 8, lines 52-58), with the caveat that the "oven air velocity should be high enough to achieve a satisfactory heat transfer coefficient, but not so high as to strip away the enrobing oil on the surface." (Col. 10, lines 14-16). Furthermore, these

patents do not deal with toaster reconstitution, rather they concern oven finishing. Oil drip is not the same concern with oven finishing as it is with a toaster because accumulation of oil in a toaster can result in a potential fire. By contrast, with oven finishing, the supporting tray is normally removed and washed before a subsequent finishing process.

Accordingly, when fairly examined for their teachings, The Kester et al. patents show that the freezing step occurs prior to enrobing with oil and prior to treatment in the air impingement oven. Further considering that the Kester et al. patents consciously avoid striping enrobing oil from the surface, we see no reason to place the impingement oven step before the freezing step. Certainly, the Biegel et al. patent does not suggest it since it relied on gravity to remove oil, rather than some intentionally applied physical force. Moreover, the Kester et al. and Taylor et al. patents are directed to oven-finished potatoes, rather than toaster finished. Finally, none of the cited references deal with a process for making potato products that have no oil drip.

The pending claims provide that the impingement heating step occurs prior to the freezing step and no oil drip. For the reasons explained above, we respectfully submit that the combined teachings of the prior art patents do not fairly meet the processing sequence recited in the pending claims. Furthermore, Claims 1 and 3 require reconstitution with a toaster. The combination of prior art references does not fairly teach a process for making potato products that are oil-drip free when reconstituted in a toaster. Accordingly, the pending claims would not have been obvious to one of ordinary skill in the art at the time of the invention, within the meaning of 35 U.S.C. § 103.

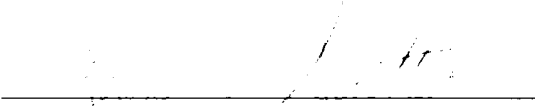
Conclusion

In view of the foregoing amendments and these remarks, it is respectfully submitted that all claims are now in condition for allowance.

Respectfully submitted,

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